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THE Fats and Oils SITUATION

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UNITED STATES DEPARTMENT OF AGRICULTURE
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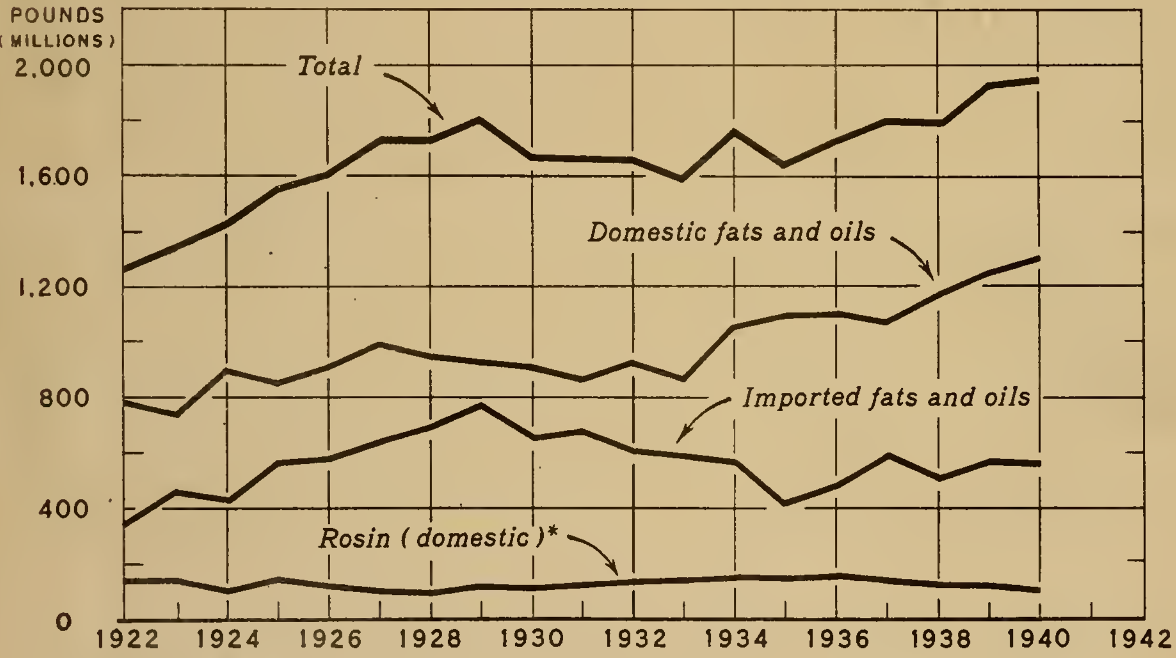
In this issue:
Utilization of fats, oils, and rosin in soap

DOMESTIC AND IMPORTED FATS AND OILS, AND ROSIN, USED IN SOAP, UNITED STATES, 1922-40



FATS AND OILS–BASIC DATA 1922-30, U. S. TARIFF COMMISSION; BEGINNING 1931, BUREAU OF THE CENSUS
ROSIN–DATA FROM BUREAU OF CHEMISTRY AND ENGINEERING **YEAR BEGINNING APRIL*

U. S. DEPARTMENT OF AGRICULTURE NEG. 39255 BUREAU OF AGRICULTURAL ECONOMICS

Approximately 1,948 million pounds of fats, oils, and rosin were used in soap manufacture in 1940, a new high record. Rosin, used largely in yellow laundry soaps, accounted for about 5 percent of the total. The use of fats and oils of foreign origin was reduced, while the use of domestic fats and oils, with abundant supplies and low prices prevailing, was increased. In 1940 domestic fats and oils accounted for about two-thirds of the total saponifiable materials used. Soap production during the past 20 years has expanded more rapidly than population, and has varied to some extent with changes in national income.

Table 1.- Price per pound of specified fats and oils, May 1939 and 1940, March-May 1941

Item	May		1941		
	1939	1940	Mar.	Apr.	May
	Cents	Cents	Cents	Cents	Cents
Butter, 92-score, Chicago	22.8	26.4	30.8	32.5	34.7
Butter, 92-score, New York	23.6	27.6	31.6	33.2	35.5
Oleomargarine, dom. veg., Chicago	14.5	15.0	14.5	14.5	14.5
Compounds (animal and veg. cooking fats), Chicago	9.2	9.5	11.1	12.4	13.0
Lard, prime steam, tierces, Chicago	6.5	5.6	7.0	8.6	9.5
Lard, refined, cartons, Chicago 1/	7.5	6.4	7.3	9.0	9.8
Oleo oil, extra, tierces, Chicago	7.5	7.0	7.2	8.9	9.8
Oleostearine, bbl., N. Y.	5.9	6.0	6.8	8.4	9.6
Tallow, edible, Chicago	5.2	4.7	6.0	7.6	8.2
Corn oil, crude, tanks, f.o.b. mills	5.9	5.9	6.6	8.3	9.9
Corn oil, refined, bbl., N. Y.	8.9	8.8	9.1	10.8	12.6
Cottonseed oil, crude, tanks, f.o.b. S.E. mills	5.6	5.7	6.4	7.9	9.2
Cottonseed oil, p.s.y., tank cars, N. Y.	6.6	6.4	7.1	8.6	10.5
Peanut oil, crude, tanks, f.o.b. mills	5.6	5.9	6.2	7.9	9.5
Peanut oil, dom. refined, bbl., N. Y.	8.9	9.2	8.8	10.6	12.5
Soybean oil, crude, tank cars, midwestern mills	4.9	5.3	6.0	7.6	8.7
Soybean oil, dom., crude, drums, N. Y.	6.3	7.1	7.9	9.2	10.4
Soybean oil, refined, drums, N. Y.	7.5	8.0	8.6	10.0	11.1
Babassu oil, tanks, f.o.b. mills, Pacific Coast	---	---	6.8	7.8	9.2
Coconut oil, crude, tanks, f.o.b. Pacific Coast 2/	6.0	5.8	6.8	8.1	9.4
Coconut oil, edible, drums, N. Y.	8.2	7.7	8.8	10.4	12.3
Olive oil, edible, drums, N. Y.	25.1	25.9	46.9	53.3	63.7
Olive-oil foots, prime, drums, N. Y.	7.1	8.5	11.5	13.2	14.8
Olive oil, inedible, drums, N. Y.	11.2	15.0	30.8	35.3	47.5
Palm oil, Niger, crude, drums, N. Y. 2/	6.8	7.5	7.7	8.3	9.0
Palm oil, Sumatra, bulk, N. Y. 2/	5.7	5.5	6.6	7.8	8.6
Rape oil, refined, denatured, drums, N. Y.	10.8	14.6	12.7	12.1	12.2
Rape oil, blown, bbl., N. Y.	14.2	17.4	17.5	17.5	17.0
Teaseed oil, crude, drums, N. Y.	9.5	12.5	17.4	18.1	18.6
Tallow, inedible, Chicago	5.0	4.2	5.4	6.8	7.5
Grease, A white, Chicago	5.2	4.2	5.5	6.9	7.6
Menhaden oil, crude, tanks, f.o.b. Baltimore	4.3	4.6	5.4	6.0	6.7
Sardine oil, crude, tanks, Pacific Coast	4.3	5.6	6.9	7.3	7.3
Whale oil, refined, bleached winter, drums, N. Y.	8.2	9.5	9.5	9.8	9.9
Linseed oil, raw, tank cars, Minneapolis	8.7	10.0	9.0	9.6	9.9
Linseed oil, raw, drums, carlots, N. Y.	9.0	10.6	10.0	10.8	10.9
Perilla oil, drums, N. Y.	9.7	18.5	18.2	18.2	18.6
Oiticica oil, drums, N. Y.	11.8	17.5	17.2	17.1	19.2
Tung oil, drums, N. Y.	17.8	24.8	28.6	30.0	31.0
Castor oil, dehydrated, drums, carlots, N. Y.	---	17.0	13.2	13.7	15.0
Castor oil, No. 3 bbl., N. Y.	8.2	12.8	9.8	9.9	11.0
Cod-liver oil, med. U.S.P. bbl., N.Y. (dol. per bbl.)	20.8	60.0	71.0	79.4	82.5
Cod oil, Newfoundland, bbl., N. Y.	4.3	---	9.0	9.8	10.0

Compiled from Oil, Paint and Drug Reporter, The National Provisioner, and reports of the Agricultural Marketing Service and Bureau of Labor Statistics. Prices quoted include excise taxes and duties where applicable. 1/ Reported in tubs prior to July 1940. 2/ Three-cent processing tax added to price as originally quoted.

THE FATS AND OILS SITUATION

Summary

Present indications point to a smaller reduction in the output of lard and greases in the United States this year than had been anticipated earlier. With production of butter, cottonseed oil, linseed oil, and peanut oil currently above last year's levels, total production of fats and oils from domestic materials may be slightly larger in 1941 than the record output in 1940. Much will depend, however, on the outturn of field crops this year. Crop conditions are reported to be generally favorable at present except in the Southeast, where there is a shortage of moisture.

Prices of fats and oils in May averaged 10 percent higher than in April. The wholesale price index for 27 fats and oils in May, at 87 percent of the 1924-29 level, was 30 percent higher than in January and 40 percent above the May 1940 index. As exceptions to the rather general advances, prices of linseed oil and perilla oil in May were about the same as a year earlier, while prices of castor oil and rape oil were lower. Prices for these oils were relatively high last year.

Factors supporting the recent price advances have included growing strength in domestic demand, together with a moderate reduction in imports of oilseeds and oils as a result of tightness in the ocean shipping situation, particularly on the Philippine-United States route. Imports normally account for 10 to 15 percent of the total supply of fats available for domestic use, with coconut oil and copra from the Philippines constituting about one-third of total imports. Rising shipping costs for imported materials generally, and Government purchases of lard and dairy products, also have been supporting factors.

Prices of domestic oilseeds have not changed so much as prices of domestic oils, mainly because of the comparative stability in prices of oilcake meal. Flaxseed prices in May were slightly lower than a year earlier, and peanut prices were about unchanged. The farm price of cottonseed, however, was about $1.00 per ton higher in May this year than last, and soybean prices were up about 24 percent.

-- June 14, 1941

REVIEW OF RECENT DEVELOPMENTS

BACKGROUND.- Following the outbreak of war in September 1939, prices of fats and oils in the United States advanced approximately 20 percent. Most of this gain was lost during the first 8 months of 1940, when the world demand for fats was greatly weakened by the closing of important European markets. In response to improvement in domestic demand and rising shipping costs for imported oilseeds and oils, prices again advanced from August to December 1940, recovering the earlier loss. Since January 1941, prices of fats and oils have advanced sharply; in May this year the general level was 30 percent higher than in January and 40 percent above that of a year earlier.

Prices up sharply in May

Prices of fats and oils advanced sharply in May, with prices generally averaging 10 percent higher than in April. The wholesale price index for 27 fats and oils in May, at 87 percent of the 1924-29 average, was at the highest level since March 1937.

Prices of all fats and oils, with the exception of rape oil and sardine oil, shared in the advance in May. Prices of linseed, tung, and perilla oils were only 2 to 3 percent higher than a month earlier, but prices of animal fats averaged 8 percent higher, vegetable oils of foreign origin, as a group, were up 12 percent, and prices of domestic vegetable oils scored an average gain of 17 percent for the month. The price of prime steam lard at Chicago in May, at 9.5 cents per pound, was 10 percent higher than a month earlier; and the price of 92-score butter, at 34.7 cents per pound, was 7 percent higher, contra-seasonally. (Table 1.)

Striking gains over prices a year ago have been recorded for most items. The price of edible olive oil in May was more than double that of a year earlier, tallow and grease prices were up about 80 percent, the price of lard was 70 percent higher, prices of cottonseed oil, coconut oil, corn oil, soybean oil, peanut oil, palm oil, oleo oil, oleostearine, fish oils, cod-liver oil, and butter were 30-60 percent higher, and the price of tung oil was 25 percent higher. Prices of linseed and perilla oils in May were about unchanged from a year earlier, while prices for rape oil and castor oil were lower. In contrast to the situation for most fats and oils, prices for the last-named items, as well as for cod-liver oil and tung oil, were high during the spring last year.

As indicated in the April issue of this report, several factors have contributed to the recent advances in prices of fats and oils. These include the growing strength in domestic demand arising from increases in industrial production, building activity, and consumer incomes, together with a reduction in the total volume of imports of oilseeds and oils resulting from the withdrawal of some British vessels from American service and the diversion of other vessels to trade in "strategic" and "critical" raw materials. Rising shipping costs for imported materials and Government purchases of lard and dairy products also have been price-supporting factors.

Although the total volume of imports so far this year has been reduced, domestic supplies of most imported items continue to be abundant. Notable exceptions are tung oil, perilla oil, cod-liver oil, and olive oil, imports of which have been sharply reduced as a result of conditions in certain foreign countries rather than because of lack of shipping space. Castor beans, flaxseed, and babassu kernels from South America have continued to come in in good volume, and imports of palm oil from the Netherlands Indies have been considerably larger so far this year than last. A reduction of nearly 20 percent in imports of coconut oil and copra from the Philippines has taken place, however. The withdrawal of British ships from American service early in 1941 apparently affected the Philippine-United States route more than any other. Recently, conditions on that route appear to have been improved to some extent.

Prices for domestic oilseeds show little change, except for soybeans

In general, prices of domestic oilseeds have not changed so much in recent months as prices of domestic fats and oils, mainly because prices for domestic oilcake meal have been maintained at comparatively low levels. Reflecting the trend in the linseed meal market (and the relative stability in the price of linseed oil), flaxseed prices were slightly lower in May than in April, and also were lower than in May last year. Peanut prices, which have been supported by the peanut-diversion program, were little changed in May from those of a month and a year earlier. Prices of cottonseed advanced in May, however, despite weakness in prices of cottonseed meal. The average price received by farmers for cottonseed in mid-May was estimated to be $27.67 per ton, nearly $2.00 higher than in mid-April and about $1.00 higher than in mid-May last year. The farm price of soybeans in mid-May, at $1.19 per bushel, was 11 percent higher than a month earlier and 24 percent higher than a year earlier. The price of soybean meal advanced in May, but continued somewhat below that of May 1940. (Tables 8 and 9.)

Among the imported oilseeds, castor bean prices netted a 12-percent gain in May, and averaged slightly higher than in May last year when Brazilian supplies were short as a result of unfavorable weather conditions. Largely as a result of an advance in shipping rates, the average price of copra at

West Coast markets advanced 30 percent from April to May, and in the latter month was more than double the price a year earlier. The price of copra meal also advanced sharply in May. As a result of action by the Maritime Commission, the advance in shipping rates for coconut oil and copra, which went into effect early in May, was rescinded later in the month.

Decline in lard output in 1941 to be less than anticipated earlier

During the first 4 months of 1941, the production of lard under Federal inspection, including rendered pork fat, totaled 512 million pounds, 9 percent less than in the corresponding period of 1940. Earlier indications pointed to a reduction of 10-20 percent in lard output for the calendar year 1941. It now seems likely that the decrease will not exceed 10 percent. In 1940, the estimated production of lard, including output on farms and in non-inspected plants, as well as that produced under Federal inspection, amounted to approximately 2,297 million pounds.

With lard and grease production reduced no more than 10 percent and with factory output of butter, cottonseed oil, linseed oil, and peanut oil running considerably above last year's levels, total production of fats and oils from domestic materials in 1941 may be slightly larger than the record output in 1940. Much will depend, of course, on the outturn of field crops this year. Dry weather has been experienced in several areas during the past 2 months, and a considerable deficiency of moisture exists in the Southeast, which may have an adverse effect not only on cottonseed and peanut production but to some extent also on the output of hog and dairy products.

Emergency castor-bean seed program announced

An emergency castor-bean seed production program was announced on June 10. This program is designed to furnish a supply of adapted seed stocks in the event defense developments should make it expedient to increase domestic castor-oil production in 1942. The program will be limited to 11 counties in the black-land area north and south of Dallas, Texas.

It is contemplated that approximately 1,700 acres of castor beans will be planted in Texas under the seed program this year. To encourage the planting of castor beans, farmers cooperating in the Agricultural Adjustment Administration program in the designated counties will be offered 3.5 cents per pound for cleaned seed, and will be exempted from deductions from their 1941 Agricultural Conservation Program payments for excess soil-depleting acreage equal to 5 acres or 5 percent of the crop land, whichever is the greater, where the excess is due to the planting of castor beans.

Planting seed of four varieties, which tests during the past several years show are the best now available in the required quantities will be distributed to cooperating farmers. The Commodity Credit Corporation will finance the purchase of the harvested beans. The beans purchased will be hulled and cleaned for storage in approved warehouses pending the determination of whether a further expansion in domestic production in 1942 is desirable.

With normal production, 1,700 acres should produce approximately 1,500,000 pounds of beans. This is enough seed to plant from 250,000 to 300,000 acres in the event it becomes necessary to do so. Plantings of 250,000 acres of castor beans would produce from 55 million to 80 million pounds of oil depending on seasonal conditions.

It was emphasized that the castor-bean seed program is strictly a defense measure made advisable by the possibility of the lack of shipping to bring in our normal requirements of tung oil from China and castor beans from Brazil and India. So far this year, imports of castor beans, chiefly from Brazil with a small quantity from India, have exceeded imports in the corresponding period in 1940. Developments in the international situation during the next 6 months are expected to determine whether or not commercial castor-bean production should be encouraged in 1942. Under normal conditions, castor beans usually cannot be grown successfully in this country in competition with beans produced in semi-tropical areas.

In the first World War, castor oil was in great demand as an aviation lubricant. During that War an unsuccessful attempt was made to grow castor beans domestically. It failed because of the lack of adapted seed. Since then, satisfactory aviation lubricants have been developed from petroleum. Dehydrated castor oil can be used as an acceptable substitute for some of the important purposes for which tung oil is now needed, a substitution of considerable importance since imports of tung oil have been sharply reduced by war in China.

UTILIZATION OF FATS, OILS, AND ROSIN IN SOAP

Consumption of fats, oils, and rosin in the soap industry in 1940, totaling 1,948 million pounds, was 21 million pounds (1 percent) larger than the previous record consumption in 1939, and was 279 million pounds (17 percent) larger than in 1930. The use of rosin in soap has declined somewhat during the past 10 years, apparently as a result of growing consumer preference for soap flakes and powders and a diminishing demand for yellow laundry soaps. The use of imported fats and oils in soap also has declined since 1930, partly because of duties and taxes levied on imports and processing. On the other hand, utilization of fats and oils of domestic origin has expanded materially in recent years. Domestic fats, which made up about 54 percent of the total saponifiable materials used in soap in 1930, accounted for two-thirds of the total in 1940. (Tables 2-4.)

Increased production also has been a factor responsible for the greater use of domestic fats and oils in soap. The most notable gain has occurred in inedible tallow and greases. Utilization of soybean oil and domestic vegetable-oil foots in the soap industry has increased to some extent.

A marked decline in the use of imported palm oil in soap has taken place during the past 10 years. The use of palm-kernel oil in soap has been almost discontinued. Palm oil is a hard oil of the tallow class, while palm-kernel oil is one of the so-called lauric-acid oils which contribute quick-lathering properties to soap. Since 1934, both these oils have been subject to an excise tax of 3 cents per pound on the first domestic processing.

Reductions in the use of palm and palm-kernel oils in soap, however, have been nearly offset, in absolute terms, by increases in the use of the quick-lathering coconut and babassu oils. Coconut oil also has been subject to a processing tax in recent years, but abundant supplies of this oil have been made available from Philippine coconut plantations at comparatively low prices. Consumption of coconut oil in soap increased from 303 million pounds in 1930 to 397 million pounds in 1940. Brazilian babassu oil, which is free of tax and duty, was virtually unknown to the domestic soap industry in 1930; use of this oil in soap amounted to about 41 million pounds in 1940. The combined consumption in soap of the three commercially important quick-lathering oils — coconut, palm-kernel, and babassu — increased from 333 million pounds in 1930 to 438 million pounds in 1940, a gain of 32 percent.

Because of their ready solubility and quick-lathering properties, there has been an increasing demand for lauric-acid soaps. The quick-lathering oils have contributed 20-22 percent of the total saponifiable materials used in the expanding output of soap in each of the past 15 years, except in 1935, following the imposition of processing taxes on coconut and palm-kernel oils.

3.6 billion pounds of soap produced in 1939

According to the Census of Manufactures, approximately 3.6 billion pounds of soap and products containing soap were produced in the soap industry in 1939 compared with 3.2 billion pounds in 1937. Output in 1939 was valued at 273 million dollars. (Table 5.)

Production of most kinds of soap and soap products was increased from 1937 to 1939. Significant reductions occurred, however, in the output of yellow bar laundry soaps, bar cleansers containing soap, and shaving cream. Production of white laundry soaps and granulated soaps, on the other hand, was materially increased. Significant gains were recorded also in output of toilet soaps, soap chips and flakes, washing powders, and liquid and textile soaps.

Glycerin production at record level in 1940

Glycerin is produced mainly as a byproduct of the soap industry. All fats and fatty oils contain glycerin, little of which is retained in soap.

According to reports of the Bureau of the Census, domestic output of crude glycerin, 80 percent basis, increased from 62 million pounds in 1919 to 197 million pounds in 1940. Production in the United States is estimated to be about half of the world total. Despite the large production in this country, there usually is a net import balance for glycerin, which has important uses in many industrial products. In 1940, however, exports of glycerin were approximately 5 million pounds in excess of imports.

The Soviet Union, Japan, Philippine Islands, Argentina, and Cuba ordinarily supply a considerable part of the glycerin imported by the United States. No glycerin was imported from the Soviet Union or Japan in 1940. Exports to Canada, Japan, and Sweden, on the other hand, assumed considerable proportions.

Domestic consumption of glycerin in 1940 was somewhat smaller than the record consumption in 1939. Stocks were increased during the year, and on December 31 amounted to approximately 90 million pounds. (Table 6.) Prices of glycerin have been maintained at a comparatively stable level during the past 2-1/2 years.

Table 2.- Estimated quantity of domestic and imported fats, oils, and rosin used in soap, United States, 1922-40

Year	Domestic fats and oils 1/	Imported fats and oils 2/	Rosin (domestic)	Total 3/	Percentage of total		
					Domestic fats and oils	Imported fats and oils	Rosin
	Million pounds	Million pounds	Million pounds	Million pounds	Percent	Percent	Percent
1922	782	338	141	1,261	62.0	26.8	11.2
1923	737	458	143	1,339	55.1	34.2	10.7
1924	891	430	105	1,426	62.5	30.1	7.4
1925	851	564	141	1,556	54.7	36.2	9.1
1926	908	578	118	1,604	56.6	36.0	7.4
1927	992	634	100	1,726	57.5	36.7	5.8
1928	949	686	91	1,726	55.0	39.7	5.3
1929	924	765	114	1,803	51.3	42.4	6.3
1930	907	653	109	1,669	54.4	39.1	6.5
1931	863	678	120	1,662	52.0	40.8	7.2
1932	923	605	131	1,658	55.6	36.5	7.9
1933	869	588	132	1,588	54.7	37.0	8.3
1934	1,052	563	142	1,757	59.9	32.0	8.1
1935	1,092	411	139	1,643	66.5	25.0	8.5
1936	1,103	474	149	1,726	63.9	27.5	8.6
1937	1,076	582	136	1,795	60.0	32.4	7.6
1938	1,168	509	117	1,794	65.1	28.4	6.5
1939	1,248	561	118	1,927	64.8	29.1	6.1
1940 4/	1,299	553	96	1,948	66.7	28.4	4.9

Compiled as follows:

Fats and oils-

1922-30, United States Tariff Commission, Report No. 41, pp. 127, 130-32.

1931-40, Bureau of the Census, Animal and Vegetable Fats and Oils, except cottonseed-oil foots and other foots, which are estimates of the Bureau of Agricultural Economics.

Rosin-

Naval Stores Research Division, Bureau of Agricultural Chemistry and Engineering, United States Department of Agriculture. Rosin data are for year beginning April.

1/ Includes all tallow, greases, stearine, lard, oleo oil, neat's-foot oil, red oil, cottonseed and other foots, cottonseed oil, corn oil, peanut oil, and, beginning 1930, soybean oil; also proportionate part of whale and fish oils represented by domestic production of those oils, and one-half the linseed oil, "other" oils, and miscellaneous soap stock used in soap.

2/ Includes all babassu oil, coconut oil, palm-kernel oil, palm oil, olive oil, castor oil, rape oil, sesame oil, sunflower oil, vegetable tallow, and, prior to 1930, soybean oil; also proportionate part of whale and fish oils represented by imports of those oils, and one-half the linseed oil, "other" oils, and miscellaneous soap stock used in soap.

3/ Total of unrounded numbers.

4/ Preliminary.

Table 3.- Soap: Fats, oils, and rosin used in manufacture, United States, 1936-40

Item	1936	1937	1938	1939	1940
Hard oils(tallow class):	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Slow lathering-					
Tallow, inedible	660,020	613,509	702,267	785,041	786,456
Whale and fish oils 1/	160,647	189,009	145,954	166,483	107,911
Greases	98,714	94,247	96,356	120,856	256,886
Palm oil	78,453	141,358	91,642	102,146	84,934
Tallow, edible	228	143	332	418	657
Oleostearine	320	321	240	278	549
Lard	9	---	1	50	645
Total	998,391	1,038,587	1,036,792	1,175,272	1,238,038
Quick lathering-					
Coconut oil	307,376	252,241	342,982	388,912	396,857
Palm-kernel oil	26,443	111,514	29,498	3,657	197
Babassu oil	8,993	14,308	8,289	37,633	41,221
Total	342,812	378,063	380,769	430,202	438,275
Soft oils:					
Cottonseed-oil foots and other foots 2/	183,000	183,000	208,000	156,000	130,000
Olive oil, sulphured and inedible	25,599	18,874	16,312	20,507	16,585
Soybean oil	5,023	10,274	10,897	11,177	17,612
Cottonseed oil	1,278	8,414	2,883	1,061	2,971
Corn oil	2,527	2,392	2,514	4,441	3,638
Castor oil	1,623	2,123	1,810	946	1,225
Linseed oil	1,482	1,359	1,455	1,780	1,489
Peanut oil	1,734	820	545	805	387
Sesame oil	1,869	2,944	302	14	38
Oleo oil	57	74	119	67	127
Rape oil	7,771	981	55	2	49
Olive oil, edible	53	21	31	54	130
Neat's-foot oil	41	16	20	11	19
Perilla oil	8	2	---	1	---
Tung oil	2	---	---	---	---
Other 3/	4,268	10,812	14,031	7,364	2,051
Total	236,335	242,106	258,974	204,230	176,321
Total fats and oils	1,577,538	1,658,756	1,676,535	1,809,704	1,852,634
Rosin 4/	148,536	136,410	117,464	117,507	5/95,633
Total saponifiable materials	1,726,074	1,795,166	1,793,999	1,927,211	1,948,267

Compiled as follows: Fats and oils, Bureau of the Census, Animal and Vegetable Fats and Oils; rosin, Naval Stores Research Division, Bureau of Agricultural Chemistry and Engineering, United States Department of Agriculture.

1/ Includes whale oil, and herring, sardine, menhaden, and other fish oils.

2/ Estimated.

3/ Reported as "other vegetable oils".

4/ The rosin season extends from April of one year through March of the next year. Data are placed in the calendar year in which most of the season occurs.

5/ Preliminary.

Table 4.- Soap: Fats, oils, and rosin as percentage of total saponifiable materials used in manufacture, United States, 1931-40

Item	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.	Pct.
Hard oils (tallow class):										
Slow lathering -										
Tallow, inedible	31.5	33.1	32.0	37.7	40.4	38.2	34.2	39.1	40.7	40.4
Whale and fish oils	7.6	5.9	6.1	5.6	8.4	9.3	10.5	8.1	8.6	5.5
Grease	7.8	8.7	7.9	8.1	6.0	5.7	5.3	5.4	6.3	13.2
Palm oil	10.4	10.1	11.8	8.8	5.3	4.5	7.9	5.1	5.3	4.4
Other	.3	.2	.2	.1	.1	1/	1/	1/	1/	1/
Total	57.6	58.0	58.0	60.3	60.2	57.7	57.9	57.7	60.9	63.5
Quick lathering -										
Coconut oil	20.5	21.3	20.3	19.4	14.0	17.8	14.1	19.1	20.2	20.4
Palm-kernel oil ..	1.7	.2	.4	.9	2.3	1.5	6.2	1.6	.2	1/
Babassu oil	---	---	---	---	---	.5	.8	.5	2.0	2.1
Total	22.2	21.5	20.7	20.3	16.3	19.8	21.1	21.2	22.4	22.5
Soft oils:										
Cottonseed-oil foots and other foots	9.1	9.2	9.1	8.0	11.6	10.6	10.2	11.6	8.1	6.7
Olive oil, sulphured and inedible	2.5	2.0	2.1	1.8	2.0	1.5	1.1	.9	1.1	.8
Soybean oil	.2	.3	.3	.1	.2	.3	.6	.6	.6	.9
Cottonseed oil ...	.1	.2	.4	.2	.1	.1	.5	.2	.1	.2
Other	1.1	.9	1.1	1.2	1.1	1.4	1.0	1.3	.7	.5
Total	13.0	12.6	13.0	11.3	15.0	13.9	13.4	14.6	10.6	9.1
Total fats and oils	92.8	92.1	91.7	91.9	91.5	91.4	92.4	93.5	93.9	95.1
Rosin	7.2	7.9	8.3	8.1	8.5	8.6	7.6	6.5	6.1	4.9
Total saponifiable materials	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1936-40, based on data in table 3; data for earlier years are given in The Fats and Oils Situation, August 1937.

1/ Less than .05 percent.

Table 5.- Quantity and value of the various kinds of soap produced in the soap industry, United States, 1937 and 1939

Item	1937		1939	
	Quantity	Value	Quantity	Value
	1,000 lb.	1,000 dol.	1,000 lb.	1,000 dol.
Bar soap	360,611	62,805	405,084	64,920
Toilet soap				
Laundry soap -				
White	488,980	28,192	660,766	29,888
Yellow	633,441	33,196	580,215	27,753
Granulated, powdered, and sprayed soap	743,195	68,409	894,727	75,632
Soap chips and flakes	390,455	38,005	419,215	34,567
Washing powders	232,411	9,104	248,342	8,839
Cleansers and scouring powders containing soap 1/	178,346	7,172	186,150	7,744
Bar cleansers containing soap	5,447	411	4,954	303
Shaving soap				
Stick, powder and cake	5,076	1,954	5,679	2,197
Cream	9,556	7,775	7,611	6,232
Liquid soap	29,870	2,435	39,164	3,340
Textile soaps	60,708	5,358	63,671	5,014
Hand pastes	16,931	1,062	18,748	1,061
Soap stock - for sale	4,522	347	4,350	286
Potash soap, other than textile and liquid	25,072	2,157	30,929	2,129
Other soap	2/ 39,790	3,422	2/ 45,640	3,560
Total	3/3,224,411	271,804	3/3,615,245	273,465

Biennial Census of Manufactures, 1939.

1/ Does not include production in the cleaning and polishing preparations industry.
2/ Estimated.
3/ Partly estimated.

Table 6.- Glycerin, crude, 80 percent basis: Production trade, stocks December 31, and apparent disappearance, United States, 1919-40

(Net exports are indicated by a minus sign)

Year	Factory production	Imports for consumption	Exports	Net imports or net exports	Stocks, Dec. 31	Apparent disappearance
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
1919	61,793	3,861	4,707	- 846	14,050	60,947
1920	54,688	29,004	2,069	26,935	22,825	72,848
1921	63,947	3,400	2,844	556	26,661	60,667
1922	85,337	3,801	3,409	392	25,894	86,496
1923	99,579	15,266	2,099	13,167	25,955	112,685
1924	95,154	16,265	1,681	14,584	26,294	109,399
1925	103,407	21,768	1,624	20,144	15,464	134,381
1926	116,369	40,970	912	40,058	26,214	145,677
1927	128,209	25,158	823	24,335	45,648	133,110
1928	130,499	10,216	2,437	7,779	39,558	144,368
1929	140,080	21,444	1,631	19,813	33,331	166,120
1930	138,675	14,987	722	14,265	32,350	153,921
1931	140,002	12,541	390	12,151	43,034	141,469
1932	133,919	8,258	309	7,949	55,627	129,275
1933	119,812	9,873	1/	9,873	30,246	155,066
1934	153,115	17,793	1/	17,793	41,228	159,926
1935	141,185	8,305	3,982	4,323	43,003	143,733
1936	154,096	15,372	1,361	14,011	38,980	172,130
1937	169,039	22,672	1,633	21,039	70,100	158,958
1938	162,120	16,243	4,449	11,794	97,086	146,928
1939	184,476	11,392	8,786	2,606	88,611	195,557
1940 2/	197,320	9,462	14,699	- 5,237	90,150	190,544

Compiled as follows:

Factory production and stocks, Bureau of the Census, Animal and Vegetable Fats and Oils. Stocks are "crude, 80 percent basis," plus "dynamite" and "chemically pure" converted to crude basis by multiplying by 0.98 and 0.95 respectively and dividing by 0.80.

Trade figures, Bureau of Foreign and Domestic Commerce, Foreign Commerce and Navigation of the United States. Imports consist of both crude and refined glycerin; refined converted to crude basis by multiplying by 0.98 and dividing by 0.80. Exports are not designated as crude or refined, but apparently are made up largely of refined with an estimated average glycerin content of 95 percent; converted to crude basis by multiplying by 0.95 and dividing by 0.80.

Apparent disappearance computed from data on production, trade, and stocks.

1/ Not separately reported.

2/ Preliminary.

Table 7.- Wholesale prices of fats and oils: Index numbers, May 1939 and 1940, March - May 1941

(1924-29 = 100)

Group	May 1939	May 1940	1941 Mar.	1941 Apr.	1941 May
Eight domestic fats and oils 1/	76	81	93	104	113
Eight domestic fats and oils	54	58	66	74	80
All fats and oils (27 items)	57	62	72	79	87
Grouped by origin					
Animal fats	52	57	67	73	79
Marine animal oils	71	90	99	105	107
Vegetable oils, domestic	66	67	71	84	98
Vegetable oils, foreign	78	88	103	114	128
Grouped by use					
Butter, unadjusted	52	60	70	74	79
Butter, adjusted 2/	57	66	68	78	86
Lard	50	43	54	65	72
Food fats, other	66	65	78	93	111
Soap fats	66	62	75	90	101
Drying oils	81	99	99	105	107
Miscellaneous oils	63	101	86	88	93

1/ 1910-14 = 100. 2/ Adjusted for typical seasonal variation.

Table 8.- Prices of specified oil-bearing materials, May 1939 and 1940, March - May 1941

Item	Unit	May 1939	May 1940	1941 Mar.	1941 Apr.	1941 May
		Dollars	Dollars	Dollars	Dollars	Dollars
Castor beans, Brazilian, ship't., c.&f., New York	Long ton	---	64.60	55.25	58.50	65.60
Copra, bags, f.o.b. Pacific Coast	100 lb.	1.88	1.62	2.38	3.01	3.90
Cottonseed, Dallas	Short ton	23.00	25.63	---	---	---
Cottonseed, U.S. farm price	" "	22.87	26.69	24.81	25.88	27.67
Flaxseed, No. 1, Minneapolis	Bushel	1.83	1.97	1.80	1.93	1.87
Flaxseed, U.S. farm price	"	1.60	1.75	1.53	1.73	1.68
Peanuts, shelled, Runners No. 1, S.E. mills	100 lb.	4.88	5.20	5.30	5.40	5.50
Peanuts, U.S. farm price	"	3.42	3.66	3.46	3.62	3.65
Soybeans, No. 2 Yellow, Chicago	Bushel	.96	1.00	1.04	1.20	1.32
Soybeans, U.S. farm price	"	.87	.96	.89	1.07	1.19

Compiled from Oil, Paint and Drug Reporter, Daily Trade Bulletin (Chicago), Daily Market Record (Minneapolis), and reports of the Agricultural Marketing Service.

Table 9.- Price per ton of specified oilcake meals, May 1939 and 1940, March-May 1941

Item 1/	May		1941		
	1939	1940	Mar.	Apr.	May
	Dollars	Dollars	Dollars	Dollars	Dollars
Copra meal, Los Angeles	24.65	20.00	25.25	30.80	35.70
Cottonseed meal, 41 percent protein, Memphis	23.65	29.40	24.45	25.20	25.10
Cottonseed meal, 41 percent protein, Chicago	29.95	36.40	30.75	31.25	30.80
Linseed meal, 37 percent protein, Minneapolis	37.80	30.25	27.40	28.50	27.10
Linseed meal, 34 percent protein, New York	2/ 39.15	31.60	23.10	24.60	24.55
Peanut meal, 45 percent protein, f.o.b. southeastern mills	21.15	29.44	20.88	24.20	23.28
Soybean meal, 41 percent protein, Chicago	26.30	28.65	26.85	27.50	28.10

Compiled from records of the Agricultural Marketing Service.

1/ Bagged, carlots, except for peanut meal.

2/ 30-32 percent protein.

Table 10.- Production and stocks of butter, lard, rendered pork fat, and cottonseed oil, April 1939 and 1940, February-April, 1941

Item	Apr.		1941		
	1939	1940	Feb.	Mar.	Apr. 1/
Production	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.	Mil. lb.
Creamery butter	145.8	153.0	130.8	149.7	163.5
Lard, Federal inspection	85.6	113.3	106.2	117.2	113.3
Rendered pork fat 2/	---	---	11.5	12.8	12.4
Cottonseed oil, crude	85.2	61.6	147.7	122.8	102.2
Stocks, end of month					
Butter	70.9	9.5	16.5	9.0	17.8
Lard	129.5	266.1	317.4	310.4	321.1
Rendered pork fat 2/	---	---	9.2	8.3	6.6
Cottonseed oil, crude basis 3/	864.1	832.0	721.7	710.4	640.1

Compiled as follows:

Production of creamery butter and cold storage holdings of butter, lard, and rendered pork fat, Agricultural Marketing Service.

Production under Federal inspection of lard and rendered pork fat, Bureau of Animal Industry.

Factory production and stocks of cottonseed oil, Bureau of the Census.

1/ Preliminary.

2/ Included with lard prior to November 1940.

3/ Crude plus refined converted to crude basis by dividing by 0.93.

Table 11.- Oleomargarine: Production and materials used in manufacture, United States, April 1939 and 1940, February-April 1941

Item	April		1941 1/		
	1939	1940	February	March	April
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.	1,000 lb.
Production:					
Colored	96	177	337	291	413
Uncolored	23,243	27,234	27,765	33,589	2/ 31,766
Total 3/	23,339	27,411	28,103	33,880	32,179
Materials used:					
Oleo oil	1,032	1,235	1,161	1,561	1,402
Oleostearine	237	314	253	282	361
Lard neutral	94	638	504	899	885
Oleo stock	81	119	120	133	84
Monostearine	---	---	11	15	14
Total animal	1,444	2,306	2,049	2,890	2,746
Cottonseed oil	7,483	8,188	11,626	13,142	12,896
Soybean oil	4,925	7,140	7,394	9,456	8,422
Peanut oil	178	113	163	165	159
Corn oil	27	32	39	39	38
Cottonseed stearine	---	---	---	1	1
Soybean stearine	---	1	2	---	---
Total domestic vegetable	12,613	15,474	19,224	22,803	21,516
Coconut oil	3,428	3,084	1,296	1,424	1,382
Babassu oil	1,247	937	62	66	211
Palm-kernel oil	126	---	---	---	---
Palm oil	---	---	---	1	31
Total foreign vegetable	4,801	4,021	1,358	1,491	1,624
Total fats and oils	18,858	21,801	22,631	27,184	25,886
Milk	4,561	5,244	5,348	6,414	6,016
Salt and other miscellaneous	1,078	1,234	1,088	1,305	1,227

Compiled from Internal Revenue records and Internal Revenue Bulletin.

1/ Preliminary.
2/ Includes manufacturers' returns not available for prior reports.
3/ Total of unrounded numbers.

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